Chapter 6
Enforcement Accomplishments

The Superfund enforcement program uses the provisions of CERCLA, as amended by SARA, to maximize the involvement of potentially responsible parties (PRPs) in the clean-up process. The goals of the program are continuing to maintain high levels of PRP participation in conducting and financing cleanups through EPA's aggressive use of statutory authority; ensuring fairness and equity; and recovering Superfund monies expended by EPA for response actions.

FY92 accomplishments illustrate the growing success of the enforcement program. For the third consecutive year, EPA achieved enforcement agreements with PRPs worth more than $1 billion in PRP response work. PRPs financed more than 70 percent of the remedial designs (RDs) and remedial actions (RAs) started during the fiscal year. Through its cost recovery program, EPA collected $185.3 million in FY92 for reimbursement of Superfund expenditures, an increase of 122 percent over the $83.4 million collected in FY91.

The Agency began several initiatives in FY92 to improve the enforcement process. The Agency issued guidance for early *de minimis* settlements to expedite and improve the negotiation process and to reduce transaction costs, finalized the lender liability rule to clarify CERCLA's secured creditor exemption, and proposed a comprehensive new rule in an effort to standardize and streamline cost recovery efforts.

6.1 The Enforcement Process

The Superfund program integrates enforcement and remediation activities. To initiate the enforcement process, EPA identifies PRPs, attempts to negotiate an agreement with them to perform or pay for the cleanup, enters into a settlement if they agree, and oversees the work performed under the settlement. If the PRPs do not settle, EPA conducts the cleanup using Superfund monies and later pursues a cost recovery action against the PRPs, or issues a unilateral administrative order (UAO) compelling them to perform the cleanup. These steps are fundamental to obtaining PRP involvement in conducting response activities and recovering expended Trust Fund monies. The enforcement process is explained in more detail below.

- When a site is being proposed to the National Priorities List (NPL) or a removal action is required, EPA conducts a PRP search to identify parties that may be liable for site cleanup. PRPs include present and past owners or operators of the site, generators of waste disposed of at the site, and transporters who selected the site for disposal of hazardous waste.
- EPA notifies parties of their potential liability for future response work and for any past response costs incurred by the government. This begins the negotiation process.
- EPA attempts to encourage PRPs to undertake clean-up activities at the beginning of clean-up phases, specifically the start of removal actions, remedial investigation/feasibility studies (RI/FSs), or remedial design/remedial actions (RD/RAs). If PRPs are willing to and capable of doing the response work, the Agency will attempt to negotiate an agreement for them to conduct and finance proposed clean-up work and to pay for past government costs. An agreement for an RA must be in the form of a judicial consent

Acronyms Referenced in Chapter 6

AOC	Administrative Order on Consent
CD	Consent Decree
DOJ	Department of Justice
NPL	National Priorities List
PCBs	Polychlorinated Biphenyls
PRP	Potentially Responsible Party
RA	Remedial Action
RD	Remedial Design
RD/RA	Remedial Design/Remedial Action
RI/FS	Remedial Investigation/Feasibility Study
SACM	Superfund Accelerated Clean-Up Model
TCE	Trichloroethylene
UAO	Unilateral Administrative Order
VOC	Volatile Organic Compound

decree (CD) entered by a federal district court. An agreement for a removal action or RD may also be in the form of an administrative order on consent (AOC) issued by a Regional Administrator. Both of these agreements are enforceable in a court of law. When PRPs conduct the response work under these agreements, EPA oversees the PRPs' work. PRPs who settle may seek contribution toward the cleanup from non-settling PRPs through third-party litigation.

- If a settlement is not reached, CERCLA Section 106 provides EPA with the authority to issue a UAO requiring the PRPs to conduct the cleanup or, through the Department of Justice (DOJ), to bring suit to compel PRPs to perform the work. If the Agency issues a UAO and the PRPs do not comply, the Agency has the option of filing a lawsuit to compel the performance specified in the order. The Agency may impose statutory penalties under CERCLA Section 106 for non-compliance with a UAO, as well as treble damages under CERCLA Section 107(c)(3).
- If PRPs do not perform the response action and the site is cleaned up using Superfund monies, EPA will file suit through DOJ, when practicable, to recover the money spent. Many of these suits to recover past costs will also include EPA claims for estimated future costs. Any money recovered from the PRPs is returned to the Trust Fund.

6.2 Fiscal Year 1992 Accomplishments

In FY92, the list of Superfund enforcement accomplishments continued to grow.

6.2.1 Settlements for Response Activities

The Agency reached 241 settlements (CDs, AOCs, or UAOs in compliance) with PRPs for response activities, worth more than $1.4 billion.* This was the third consecutive year that annual response settlements exceeded $1 billion. Exhibit 6.2-1 compares the response settlements achieved in FY91 and FY92. The Agency has achieved a total of more than $7.6 billion in response settlements under the Superfund program through FY92.

Of the 241 response settlements achieved, 90 settlements, worth more than $1.2 billion, were for RD/RAs. The RD/RA settlements consisted of 42 CDs for RD/RAs, 45 UAOs for RD/RAs where PRPs were in compliance, and 3 AOCs for RDs. These settlements are a result of the 100 RD/RA negotiations started and 116 completed by EPA during the fiscal year.

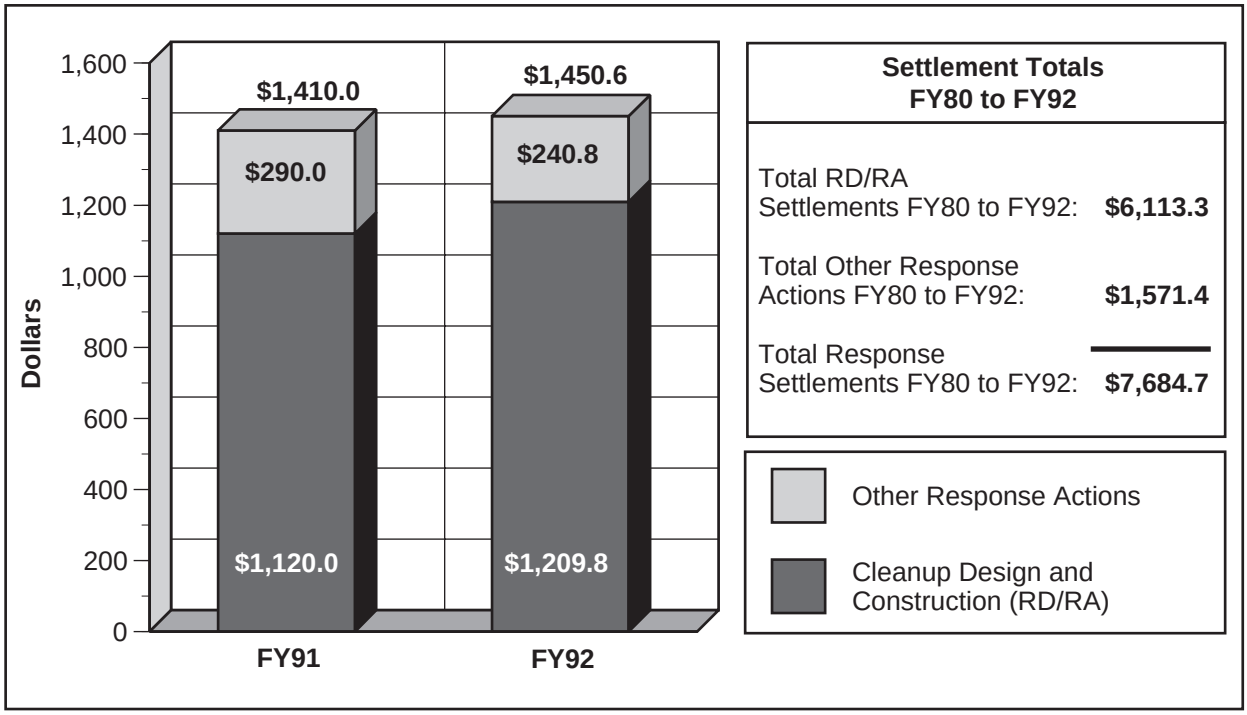
The Agency issued a total of 110 UAOs during FY92, including 48 for RD/RAs. The Agency entered a total of 135 AOCs, including the 3 for RDs. The total UAOs issued and AOCs entered include agreements for removal actions, RI/FSs, RDs, and RD/RAs.

6.2.2 PRP Participation in Clean-Up Activities

Exhibit 6.2-2 illustrates the dramatic increase in the participation of PRPs in undertaking and

* Although UAOs are not technically settlements, EPA considers them settlements because EPA utilizes UAOs to accomplish PRP response.

Exhibit 6.2-1
Estimated Value of PRP Response Settlements
(in Millions)



Source: CERCLIS; Office of Waste Programs Enforcement. 51-013-34F

financing RDs and RAs since the enactment of SARA in 1986. During FY92, PRPs continued to finance and conduct an increasing percentage of the RDs and RAs undertaken by EPA or PRPs at NPL sites.

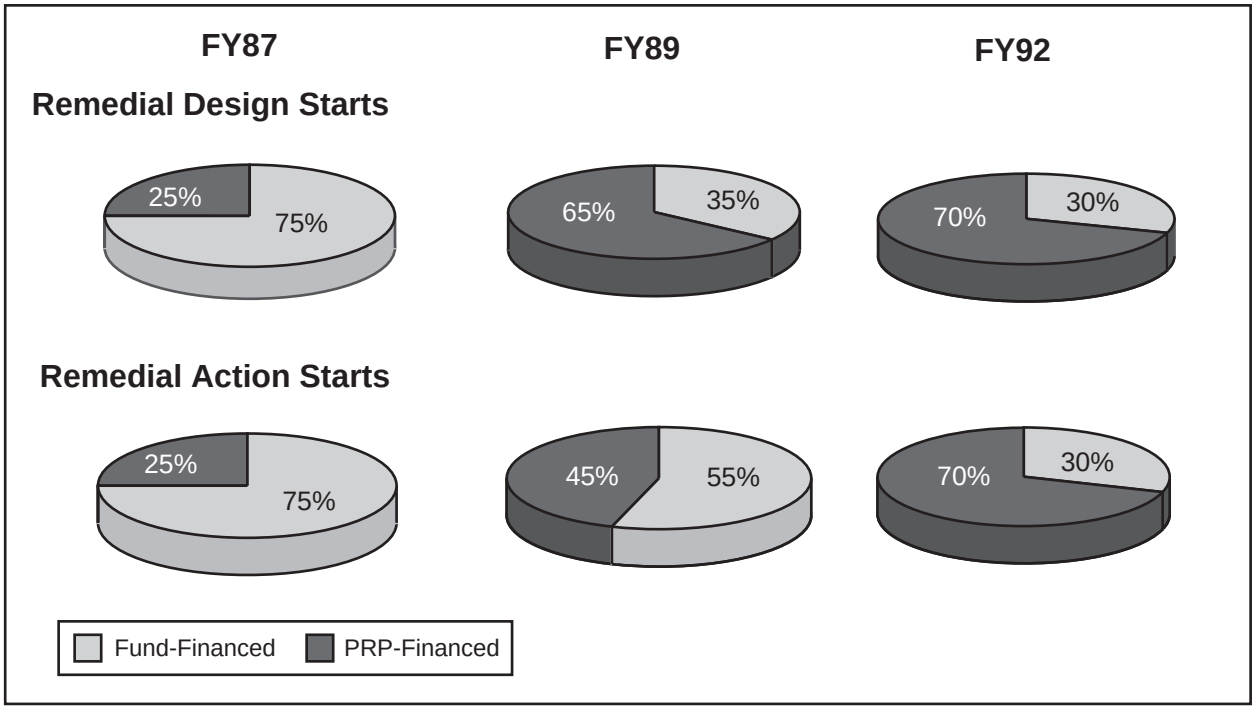
- PRPs started slightly more than 70 percent of the RDs in FY92, compared to slightly less than 70 percent in FY91; and
- PRPs started more than 70 percent of the RAs in FY92, compared to nearly 65 percent in FY91.

PRPs started fewer RI/FSs in FY92 than in FY91. PRPs undertook 50 percent of the RI/FSs in FY92, compared to 70 percent of the RI/FSs in FY91.

6.2.3 Cost Recovery Achievements

During FY92, EPA and DOJ achieved settlements worth $250.6 million for recovery of Trust Fund expenditures. These FY92 settlements represent more than 30 percent of the total $842.9 million achieved in cost recovery settlements under the program and a 74 percent increase over the $144.3 million in settlements reached in FY91. Included in FY92 settlements were 83 administrative cost recovery settlements worth $24.1 million. Exhibit 6.2-3 illustrates cost recovery settlement accomplishments for FY91, FY92, and program-to-date.

Exhibit 6.2-2
Increase in the Percentage of Remedial Designs and Remedial Actions Started by PRPs Since the Enactment of SARA



Source: CERCLIS; Office of Emergency and Remedial Response; Office of Waste Programs Enforcement. 51-013-35F

EPA collected $185.3 million on cost recovery settlements, bankruptcy settlements, and other sources. These FY92 collections represent a 122 percent increase over the $83.4 million collected in FY91 and 34 percent of the $546.3 million collected by EPA under the program-to-date. Exhibit 6.2-4 illustrates cost recovery collections for FY91, FY92 and program-to-date.

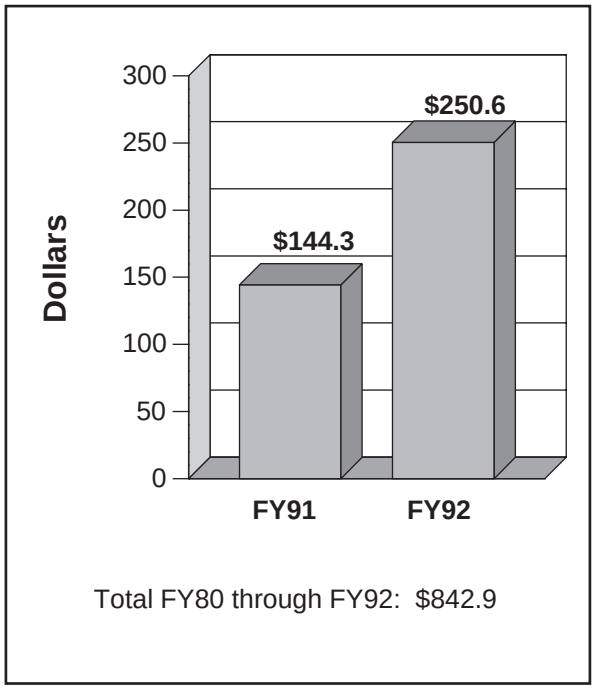
6.3 Success in Reaching and Enforcing Agreements with PRPs

During FY92, the EPA Offices of Regional Counsel and Regional Waste Management Divisions, working in conjunction with the Office of Waste Programs Enforcement, Office of Enforcement, and DOJ, entered into a number of enforcement agreements with PRPs, establishing several major enforcement precedents. Examples of significant CDs for RD/RAs, UAOs, CDs for cost recovery, and AOCs for *de minimis* settlements under CERCLA Section 122(g) are described below.

6.3.1 Consent Decrees for Remedial Design/Remedial Action

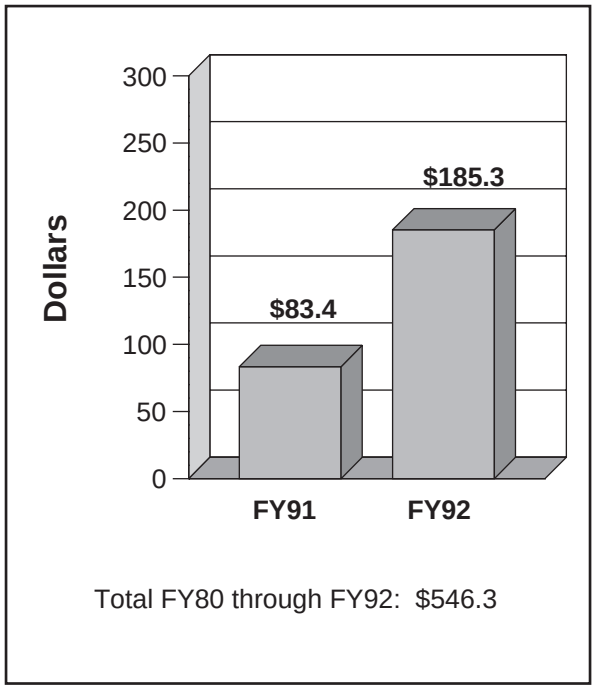
Dover Municipal Landfill, New Hampshire (Region 1): EPA reached an agreement with 25 PRPs at the Dover Municipal Landfill in Strafford County, New Hampshire. The CD was referred to DOJ on June 4, 1992, and was lodged with the U.S. District Court for the District of New Hampshire on

Exhibit 6.2-3
Cost Recovery Settlements
(in Millions)



Source: CERCLIS; Office of Waste Programs Enforcement. 51-013-36E

Exhibit 6.2-4
Cost Recovery Collections
(in Millions)



Source: CERCLIS; Office of Waste Programs Enforcement. 51-013-37H

August 7, 1992. The estimated value of the settlement is $31.6 million, representing future response costs and most of EPA's past costs. Some of the parties have agreed to perform the work at the site, and others, as "cash-out" defendants, are required to contribute to the cost of the cleanup. The work to be performed at the site includes installing a landfill cap with a leachate collection and treatment system and constructing a ground-water pump and treat system. The clean-up action is designed to remove volatile organic compounds (VOCs) and heavy metal contaminants from ground water and surface water on and near the site.

New Bedford Harbor, Massachusetts (Region 1): On August 21, 1992, a CD was referred to DOJ, and on September 4, 1992, DOJ lodged the CD with the U.S. District Court for the District of Massachusetts, settling claims for clean-up costs, injunctive relief, and natural resource damages at the New Bedford Harbor site. Under this cash-out agreement, Federal Pacific Electric Company and Cornell Dubilier Electronic, Inc., will pay $21 million. This sum includes $1 million plus accrued interest for EPA's past clean-up costs; $10 million, plus accrued interest, for environmental damage and restoration costs incurred by the National Oceanic and Atmospheric Administration and the Massachusetts Secretary of Environmental Affairs; and $10 million to fund EPA's future cleanup and natural resource restoration. The primary contaminants of concern at the site are polychlorinated biphenyls (PCBs) and metals, including lead.

Marathon Battery, New York (Region 2): On September 30, 1992, EPA referred a CD to DOJ after successfully reaching an agreement with three PRPs to clean up the 60 acre Marathon Battery site in Cold

Spring, New York. DOJ lodged the CD with the U.S. District Court for the Southern District of New York on January 6, 1993, and the court entered the agreement on January 17, 1993. Under the terms of the CD, Gould Incorporated will perform the comprehensive cleanup, and Marathon Battery Corporation and the U.S. Army will help to finance the work, estimated to cost $100 million. The three PRPs have also agreed to reimburse EPA for $9 million in past costs. The cleanup, which will be performed under EPA oversight, will address three distinct areas of the site and include treatment of cadmium-contaminated sediment and soil.

Sangamo Weston/Twelve Mile Creek/Lake Hartwell Site, South Carolina (Region 4): On April 15, 1992, EPA reached a successful agreement with Schlumberger Industries, Inc., to fund and perform the first phase of comprehensive clean-up actions at the former disposal area, located in Pickens County, South Carolina. Under the terms of the CD, which was referred to DOJ on March 4, 1992, and lodged with the U.S. District Court in South Carolina, the PRP will perform clean-up work estimated to cost $47.9 million, reimburse EPA for 100 percent of more than $0.7 million in past costs, and pay EPA's future oversight costs at the site. A unique aspect of the settlement is that Schlumberger agreed to implement any remedy that EPA selected. The Agency has chosen an alternative technology called low thermal desorption. Schlumberger also agreed to pay for further remedial action using standard technologies should the innovative method prove ineffective. Soil and ground water at the site are contaminated with PCBs.

G & H Landfill, Michigan (Region 5): EPA successfully reached an agreement with PRPs for clean-up actions at the G & H Landfill site in Macomb County, Michigan. The CD was referred to DOJ on June 30, 1992, and lodged with the U.S. District Court for the Eastern District of Michigan on September 10, 1992. Under this settlement, 14 PRPs will conduct and pay for cleanup, which is estimated to cost $40 million. The parties also agreed to reimburse EPA for approximately 50 percent of past response costs, or approximately $2.5 million. Through this settlement and previous settlements at the site, EPA has recovered all of its past costs and has succeeded in gaining the PRPs' cooperation in performing cleanup of PCBs and heavy metal contamination and in paying for future EPA oversight costs.

Hunt's Disposal Landfill, Wisconsin (Region 5): EPA successfully reached an agreement with 40 PRPs to pay for and perform the cleanup of the 35 acre Hunt's Disposal site in Caledonia, Wisconsin. The CD was referred to DOJ on March 27, 1992, and lodged with the U.S. District Court for the Eastern District of Wisconsin on April 21, 1992. Under the terms of the settlement, the parties will perform and pay for the cleanup, which is estimated to cost $21 million, including future EPA oversight costs. In addition, the PRPs will reimburse EPA for 100 percent of its past response costs incurred at the site, or approximately $1.5 million. The comprehensive cleanup addresses soil, ground water, and surface water contaminated with heavy metals and VOCs.

6.3.2 Unilateral Administrative Orders

General Motors Corporation (Central Foundry Division), New York (Region 2): The EPA Region 2 Administrator issued two UAOs to the General Motors Corporation (GM), requiring the company to clean up its 270 acre GM/Central Foundry site in Massena, New York. The first UAO, which was issued on March 31, 1992, addresses the cleanup of sediment in the St. Lawrence River and river basin, contaminated soil on the neighboring St. Regis Mohawk Reservation and on the GM Property, four lagoon areas, and the East Disposal Area. The work to be conducted under this order is estimated to cost $78 million. The second UAO, issued on August 18, 1992, requires GM to clean up a 12 acre landfill and the North Disposal Area. The estimated value of this work is $45 million. GM is complying with the UAOs.

Thermo-Chem, Inc., Michigan (Region 5): On May 6, 1992, the EPA Region 5 Administrator issued a UAO requiring 20 PRPs to conduct and pay for the cleanup at one portion of the Thermo-Chem disposal site, located in Muskegon County, Michigan.

The estimated value of the work is $24.2 million. The clean-up plan involves excavating contaminated soil and extracting contaminated ground water. The primary contaminants of concern are VOCs, including trichloroethylene (TCE), toluene, and xylene. The PRPs are complying with the UAO.

Denver Radium, Operable Unit 8, Colorado (Region 8): On August 21, 1992, the EPA Region 8 Administrator issued a UAO to the Shattuck Chemical Company to pay for and perform the cleanup of its property. The total estimated cost of the cleanup is $26 million, and the PRP is complying with the order.

The site, Denver Radium, is located in the Denver metropolitan area and consists of 44 separate properties, including the Shattuck Chemical area that is contaminated with radioactive sands and waste. Under the terms of the UAO, the PRP is dismantling several buildings on the site and shipping radioactive debris to a secure, off-site facility. In addition, radioactive soils both on the site and on nearby properties will be excavated, solidified with cement or another hardening agent, disposed of on site, and capped. Ground water is also being monitored. Under EPA supervision, PRPs will conduct long-term monitoring of the site to assure clean-up levels are met.

Gould, Inc., Oregon (Region 10): The EPA Region 10 Administrator issued a UAO to seven PRPs on January 22, 1992, directing them to clean up the 14 acre Gould, Inc., site in Portland, Oregon. In compliance with the order, the PRPs will pay for and clean up the first operable unit, which consists of contaminated soil and sediment. The total estimated value of the work is $19.4 million, including future oversight costs of $0.7 million.

At the site, soil and sediment are contaminated with high levels of lead, chromium, and arsenic, which were released during nearly four decades of lead smelting activities and lead-acid battery disposal. The PRPs are currently excavating battery casing fragments and recycling the components. In addition, they are required to excavate contaminated soil and sediment, which will be solidified with a hardening agent, disposed of on site, and covered with a soil cap. On-site air monitoring will be conducted to ensure federal, state, and local air-quality levels are met.

6.3.3 Consent Decrees for Cost Recovery

Cannons Engineering, Massachusetts/New Hampshire (Region 1): In an ongoing enforcement effort, EPA reached an agreement with six PRPs to fund clean-up actions at four Superfund sites, collectively known as the Cannons Sites Group. The sites are the Cannons Bridgewater facility in Bridgewater, Massachusetts; the Cannons Plymouth Harbor site in Plymouth, Massachusetts; the Gilson Road site in Nashua, New Hampshire; and the Tinkham's Garage site in Londonderry, New Hampshire. The CD was referred to DOJ on April 29, 1992, and lodged with the U.S District Court for the First District of Massachusetts on June 26, 1992. Under the terms of the CD, the PRPs agreed to pay EPA $5.8 million for past and future response costs. The primary contaminants affecting soil, surface water, and ground water at and around the Cannons Sites Group are VOCs and PCBs. To date, 380 settling parties, including 313 *de minimis parties*, have participated in cost recovery settlements with EPA. The estimated total value of these settlements is $59.5 million.

Fisher-Calo, Indiana (Region 5): EPA reached a successful agreement with more than 260 PRPs to clean up the 250 acre, former solvent processing and reclaiming facility located in LaPorte County, Indiana. The CD was referred to DOJ on December 30, 1991, and lodged with the U.S. District Court for the Northern District of Indiana on February 27, 1992. Under the terms of this agreement, the parties must pay for and perform site clean-up activities, which are estimated to cost $31 million, including future EPA oversight and response costs. The parties will also reimburse EPA for $3.1 million in past response cost. The primary contaminants of concern include PCBs and VOCs. Although EPA did not specify the use of innovative technologies in its clean-up plan for treating soil and ground water, the plan calls for pilot studies of alternative clean-up

methods to be conducted should additional contamination be found.

MIDCO I and MIDCO II, Indiana (Region 5): On January 10, 1992, EPA referred a CD for the MIDCO I and MIDCO II sites in Gary, Indiana, to DOJ. The CD was lodged with the U.S. District Court for the Northern District of Indiana on January 31, 1992, and entered by the court on June 23, 1992. Under the terms of the CD, which is a combined settlement for cleanup, 94 parties, including 32 *de minimis parties,* agreed to pay past costs and penalties and to finance and perform future cleanups at both of these Superfund sites. The parties will reimburse EPA a total of $5 million for past costs and pay $0.4 million in civil fines. At MIDCO I, the parties will also perform and pay for the remedy, estimated to cost $10 million. At MIDCO II, the parties agreed to pay for and perform response actions estimated to cost $13 million.

Ground water at both sites is highly contaminated with VOCs (toluene, benzene, and trichloroethylene (TCE)), as well as isoporone, cyanide, arsenic, lead, and other metals. PCBs have been detected in sediment and soil. Since 1981, EPA has undertaken a series of emergency removal actions, including removal of drums, tanks, and contaminated soil. Currently, RD efforts are underway at both sites for RAs that will include treatment of contaminated soil, sediment, and ground water.

Summit National, Ohio (Region 5): EPA successfully reached an agreement with Beazer East Company to reimburse 98 percent of costs incurred by EPA at the 11.5 acre, former liquid waste disposal facility in Deerfield, Ohio. The U.S. District Court for the District of Ohio entered the CD on February 14, 1992. The settlement requires Beazer Company to reimburse EPA $2.4 million for past costs, plus $0.2 million in interest. In a previous settlement, 64 PRPs agreed to fund and perform a comprehensive cleanup of contaminated soil, surface water, and ground water. VOCs are the major contaminants at the site.

Verona Well Field, MI (Region 5): EPA reached a successful agreement with nine PRPs for the reimbursement of past costs associated with one portion of the 160 acre well field. The CD was entered by the U.S. District Court for the Western District of Michigan on November 15, 1991. Under the terms of the agreement, the parties will reimburse EPA $11.8 million, representing 100 percent of the clean-up costs EPA incurred at this portion of the site. The primary contaminant at this portion is TCE.

Crystal Chemical Co., Texas (Region 6): EPA reached a successful agreement with the Southern Pacific Transportation Company and Voluntary Purchasing Groups Inc., to pay for the cleanup of a 6.8 acre chemical manufacturing facility in Houston, Texas. The partial CD was referred to DOJ on January 3, 1992, and lodged with the U.S. District Court for the Southern District of Texas on March 2, 1992. Under the terms of the partial CD, the two PRPs agreed to reimburse the $3 million in response costs that EPA incurred at the site through January 1, 1992. This sum represents 95 percent of the costs sought in this case. The primary contaminant at this site is arsenic, which has contaminated the ground water, soil, and surface water.

Aidex Corporation, Iowa (Region 7): EPA reached a successful agreement with eight PRPs to recover costs incurred during the cleanup of this former pesticide formulation facility located near Council Bluffs, Iowa. The CD was lodged with the U.S. District Court for the Southern District of Iowa on November 20, 1991, and entered by the court on February 6, 1992. Under the settlement, EPA and the State of Iowa will each recover 80 percent of their past costs for the cleanup of pesticide-contaminated soil, surface water, and ground water at and near the site. EPA will recover approximately $10.4 million and the State of Iowa will recover approximately $0.88 million, including $0.15 million for the cost of future ground-water monitoring. The primary contaminants affecting soil, surface water, and shallow ground water include pesticides, pesticide-related wastes, and VOCs.

Missouri Electric Works, Missouri (Region 7): EPA reached a mixed funding settlement with more than 170 PRPs, including approximately 130 *de minimis* settlers and 3 federal agencies (U.S. Army, U.S. Air Force, and the Defense Logistics Agency), in connection with the 6.5 acre Missouri Electric Works site in Cape Girardeau County, Missouri. On

June 29, 1992, DOJ lodged the CD with the U.S. District Court for the Eastern District of Missouri. Under the terms of the agreement, the PRPs will pay for comprehensive clean-up actions, estimated to cost $15 million. In addition, the *de minimis* PRPs will pay $80,000 toward EPA's total $1.2 million in past costs, which will release them from future liability. EPA will pay a maximum of 20 percent, or $3.5 million, toward the cleanup. Also, the Agency anticipates that it will take future cost recovery actions against recalcitrant PRPs to recover EPA's present share, or the "mixed" portion of the settlement.

PCBs and VOCs affect air, sediment, soil, and ground water at the site. The EPA-selected remedy provides for on-site incineration of PCB-contaminated soil, and pumping and treating of ground water by air-stripping and carbon adsorption.

Smuggler Mountain, Colorado (Region 8): Region 8 referred a CD for RD/RA to DOJ on March 20, 1992, and on May 4, 1992, the CD was lodged with the U.S. District Court for the District of Colorado. The agreement is for recovery of $3.2 million in clean-up costs incurred at the 116 acre Smuggler Mountain site in Pitkin County, Colorado, and represents a cash-out settlement for two PRPs, the Atlantic Richfield Company and the U.S. Department of the Interior. The cash-out allows EPA to recover $1.6 million from each party for past and future response costs, and exempts the parties from further responsibility for the clean-up plan. It is expected that, combined with other cost recovery actions at the site, the amount paid by each of these parties will represent 10 percent of the total response costs. The primary contaminants of concern consist of various heavy metals from previous mining and smelting operations at the site.

Indian Bend Wash Area, Arizona (Region 9): EPA reached an agreement with eight PRPs to perform the cleanup of the northern section of the Indian Bend Wash Area site in Maricopa County, Scottsdale, Tempe, Phoenix, and the Salt River Indian Reservation, Arizona. The CD was referred to DOJ on August 21, 1992, and lodged with the U.S. District Court for the District of Arizona on December 7, 1992. Under the terms of the agreement, the settling parties have agreed to reimburse EPA $5.1 million for costs incurred at the site and to provide $5 million to implement the remedy for ground-water and soil cleanup. The primary contaminants of concern are VOCs, cyanide, acids, and heavy metals, including chromium and lead.

United Chrome, Oregon (Region 10): EPA reached a successful agreement with the City of Corvallis, Oregon, to clean up the former chrome-plating facility and reimburse EPA for past costs. The CD was lodged with the U.S. District Court for the District of Oregon on June 29, 1992, and entered by the court on September 21, 1992. Under the terms of the CD, the City of Corvallis is required to pay EPA $2 million. The primary contaminant of concern at the site is chromium.

6.3.4 *De Minimis* Settlement Under CERCLA Section 122(g)

Shore Realty, New York (Region 2): On August 5, 1992, an AOC between EPA and 136 settling *de minimis* parties became effective. The *de minimis* settlement total is $2.1 million, and each PRP's responsibility will be proportional to its contribution of waste to the site. The agreement includes nearly $0.28 million for past costs and estimated future costs, and a premium of more than $1.8 million to be placed in a trust fund for use by the non-*de minimis* settlors and the State of New York for future clean-up costs at the site. Total estimated costs for the site are $9.9 million.

Tonolli Corporation, Pennsylvania (Region 3): EPA entered an AOC with 170 *de minimis* parties at the Tonolli Corporation site in Nesquehoning, Pennsylvania. The AOC, signed on July 1, 1992, resolves the liability of the participating PRPs. The settlement requires payments for past costs and estimated future response costs proportional to the volume of waste each PRP contributed to the site, plus a settlement premium of 65 percent to cover unexpected future costs. The total value of the settlement is approximately $3.5 million, including $2.4 million for past costs incurred by EPA and $1 million to finance future clean-up work at the site.

The 20 acre Tonolli Corporation site is an abandoned secondary lead smelting plant that operated from August 1974 to October 1985, when the company filed for bankruptcy. The site consists of a battery crushing operation, smelter, refinery, water treatment plant, hazardous waste landfill, and hazardous waste above-ground storage tank. The primary contaminants of concern are heavy metals, such as lead, cadmium, chromium, zinc, and arsenic. Past EPA actions have included treating lagoon and tank contents, discharging treated effluent to a nearby creek, installing a semi-permanent water collection and treatment system around waste storage areas, and excavating contaminated soil and sludge from on-site lagoons.

Alaskan Battery Enterprises, Alaska (Region 10): September 14, 1992, was the effective date of an AOC for recovering past EPA costs at the Alaskan Battery Enterprises site in Fairbanks, Alaska. Twenty-seven *de minimis* PRPs signed an AOC agreeing to reimburse EPA for more than $0.17 million. All eligible *de minimis* parties, consisting primarily of small businesses, signed the AOC.

Collectively, the settling parties sent more than 2,600 batteries to the Alaskan Battery site from the late 1960s to 1988. Battery parts were stored, recycled, and disposed of on site. As a result, soil was contaminated with lead, posing a threat to ground water. In 1988 and 1989, EPA removed approximately 4,000 cubic yards of lead-contaminated soil. A recently completed site study calls for long-term monitoring of ground water to detect any lead migration from the soil. Total response costs at the site are estimated at $3 million.

EPA encouraged the *de minimis* parties to work together to lower their transaction costs. EPA drafted the AOC, made a settlement offer to the eligible parties, made suggested changes to the AOC, and secured the participation of all parties eligible for *de minimis* settlement. EPA is pursuing additional PRPs for the unrecovered share of past costs in a separate cost recovery action.

6.4 Enforcement Initiatives

During FY92, EPA continued efforts to develop more efficient ways to encourage PRP participation in cleanups and to recover Trust Fund monies. The Agency launched several initiatives to expedite and improve the negotiation process, reduce transaction costs, and standardize and streamline cost recovery efforts.

6.4.1 Enforcement Under the Superfund Accelerated Clean-Up Model

EPA is modifying its approach to CERCLA enforcement to correspond to the changes in the clean-up program that will be brought about by the implementation of the Superfund Accelerated Clean-Up Model (SACM). The Agency is streamlining enforcement-related activities to support faster and more efficient cleanups envisioned under SACM, while continuing to maximize the amount of response work conducted by PRPs.

Major enforcement activities affected by shortened clean-up schedules under SACM include searching for PRPs, establishing PRP liability, involving PRPs in early site assessment activities, and encouraging PRPs to undertake non-time-critical removals. To expedite these activities, EPA has adopted a new, phased approach. The phased approach focuses first on a limited PRP search to establish the liability of easily identified PRPs. EPA can begin negotiations with the identified PRPs, and clean-up work can proceed while the search for additional PRPs continues. When this phased approach is used, Regions are encouraged to provide "constructive" notice, i.e., notices in local newspapers and the *Federal Register* to alert unidentified PRPs who might be interested in participating in site decisions.

6.4.2 Early *De Minimis* Guidance

EPA emphasizes the use of *de minimis* settlements under CERCLA Section 122(g) to lower transaction costs and increase case management efficiency at sites where there are large numbers of PRPs. Under this statutory provision, the Agency settles with PRPs (generators and transporters) whose waste contribution at a site is minimal in terms of both volume (usually less than one percent of the total waste volume) and toxicity. The number of *de minimis* PRPs at sites is often many times greater than the number of major waste contributors.

On June 26, 1992, EPA issued *Methodology for Early de minimis Waste Contributor Settlements, under CERCLA Section 122(g)(1)(A),* to facilitate *de minimis* settlements. The guidance recommends that Regional officials initiate the *de minimis* settlement process as early as possible. The process includes (1) informing EPA Headquarters and notifying potential *de minimis* parties of their eligibility; (2) providing a waste-in list that identifies the specific amounts and types of waste contributed by each PRP; (3) defining the criteria for *de minimis* eligibility; (4) forming a *de minimis* settlement group early in the process; and (5) offering incentives for timely settlement. The guidance suggests procedures for standardizing the *de minimis* settlement process, including methods for estimating future costs and establishing criteria to allocate financial responsibility among PRPs. It also outlines reimbursement provisions to be included in the settlement document.

6.4.3 Final Lender Liability Rule

On April 29, 1992, to define terms and clarify potential liability of lenders and government entities as owners or operators under CERCLA, the Agency finalized the lender liability rule. The final rule clarifies the "security interest exemption" provision of CERCLA, and interprets the term "involuntary acquisition" as it pertains to government entities.

CERCLA Section 101(20)(A) exempts from liability a person who, without participating in the management of a facility, holds indication of ownership to protect a security interest. The April 29, 1992, rule clarifies which activities are and are not considered to be "participating in management."

The rule also exempts governmental entities from liability when they act as conservator or receiver of property through an involuntary acquisition or transfer. Involuntary acquisition includes abandonment proceedings, tax delinquencies, asset forfeitures, foreclosures, and seizures. Private parties are not covered by this provision of the rule.

6.4.4 Cost Recovery Initiatives

At sites where EPA has undertaken clean-up activities using Trust Fund monies, the Agency will pursue cost recovery actions requiring PRPs to reimburse the Trust Fund. To expedite the cost recovery process, the Agency proposed a rule on August 6, 1992, to clarify which costs EPA can recover through cost recovery actions. The rule

- Adds types of indirect (overhead) costs that EPA can recover;
- Identifies how costs are determined;
- Specifies when interest begins to accrue on the monies owed to the Trust Fund;
- Describes the information and documentation needed to substantiate expenditures; and
- Clarifies when the limitations period for EPA to bring a cost recovery action begins.

Although EPA has sought recovery of all direct costs incurred at a site, i.e., those directly attributable to site remediation activities, the Agency has sought to recover only a portion of its indirect costs. In contrast, the proposed rule uses full-cost accounting to identify all indirect costs incurred by the Superfund program for recovery. Additional categories of indirect costs that EPA will recover under the proposed rule include costs of

- Research and development for scientific studies, such as those involving the Superfund Innovative Technology Evaluation program;
- Depreciation of non-site-specific capital equipment, such as computer and laboratory equipment; and
- Preliminary site costs.

The proposed rule is not retroactive. The Agency will only apply the new rate to cost recovery actions that have not been finally resolved. The Agency anticipates that this rule will clarify common issues argued in cost recovery cases, thereby providing a substantial savings by reducing both PRP and EPA transaction costs.